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10/043,077	01/09/2002	Kenneth E. Flick	58090	6614

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EXAMINER

YANG, CLARA I

ART UNIT PAPER NUMBER

2635

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/043,077

Applicant(s)

FLICK, KENNETH E.

Examiner

Clara Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 24 May 2004 with respect to claims 1, 18, 30, 46, and 57 (see pages 18 - 19) have been considered but are moot in view of the new ground(s) of rejection.

### *Terminal Disclaimer*

2. The terminal disclaimer filed on 24 May 2004 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of U.S. Patent No. 6,140,938 has been reviewed and is accepted. The terminal disclaimer has been recorded.
3. The terminal disclaimer filed on 9 July 2004 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of U.S. Patent No. 6,140,939 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 - 9, 16, 18 - 23 and 46 - 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,113,182 (Suman et al.) in view of U.S. Patent No. 6,011,460 (Flick).

Referring to Claims 1 - 3, 16, 18, 19, and 46 - 48, Suman's vehicle door locking system, as shown in Fig. 1, comprises (a) remote transmitter 20 for transmitting a coded signal (see Col. 3, lines 20 - 31) and control module 30 at vehicle 10. As shown in Fig. 4, Suman's control module

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30 includes: (b) receiver 72 within control module 30 for receiving signals from remote transmitter 20 (see Col. 3, lines 36 - 40); (c) data bus 80; (d) microcontroller 52 that is connected to receiver 72 and data bus 80 (see Fig. 4); and (e) a plurality of vehicle devices, including a chime or vehicle indicator, connected to microcontroller 52 via bus 80 (see Fig. 4). Per Suman, microcontroller 52 is able to: (1) communicate with the vehicle devices via data bus 80 (see Col. 6, lines 57 - 64); (2) learn remote transmitter 20's unique code (see Col. 5, lines 2 - 13 and Col. 11, lines 11 - 33); and (3) cause the vehicle chime to sound when a new code has been learned (see Col. 11, lines 33 - 38). As shown in Fig. 4, microcontroller 52 is spaced apart from a plurality of vehicle devices (see Col. 6, lines 57 - 68 and Col. 7, lines 1 - 4). Suman, however, omits teaching that data bus 80 extends throughout vehicle 10.

In an analogous art, Flick teaches a vehicle security system, see Figs. 1 - 3, comprising: (a) remote transmitter 50 (see Col. 5, lines 32 - 58); (b) transmitter and receiver 13 at the vehicle for receiving signals from remote transmitter 50 (see Col. 4, lines 51 - 54); (c) data communications bus 62 that extends throughout the vehicle (see Col. 5, lines 11 - 31 and Col. 6, lines 24 - 30 and 50 - 58); (d) a plurality of vehicle devices (e.g., vehicle security sensor 60, alarm indicator 64, other control nodes 66) connected to bus 62 (see Col. 6, lines 1 - 9 and 50 - 58); and (e) central processing unit (CPU) 65 and bus interface 65 that is spaced apart from the vehicle devices (see Col. 6, lines 18 - 23).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle security system of Suman as taught by Flick because connecting vehicle devices directly to a data bus that extends throughout a vehicle reduces (1) the amount of wiring, (2) wire routing problems, and (3) complications that may

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arise when troubleshooting the electrical system (see Flick, Col. 1, lines 65 – 67 and Col. 2, lines 1 – 3).

Regarding Claims 4, 20, and 49, Suman imparts that control module 30 may be mounted within an overhead console, which includes lamps (i.e., “vehicle indicators”), a vehicle compass, and other vehicle accessories (see Col. 3, lines 26 – 36). Because the overhead console includes a compass, the overhead console is understood to be an instrument panel.

Regarding Claims 5, 21, and 50, Suman’s control module 30, as shown in Fig. 4, includes switches 60 – 61 or vehicle sensors that communicate with microcontroller 52 via parallel input data bus 53 (see Col. 6, lines 6 – 30).

Regarding Claims 6, 22, and 51, Suman’s control module 30, as shown in Fig. 4, further comprises a vehicle alarm indicator that is activated by microcontroller 52 via data bus 80 when the vehicle anti-theft alarm has been set (see Col. 12, lines 20 – 23). Microcontroller 52 is also able to communicate with the vehicle horn and headlights and actuate them in the event a tamper signal has been received (see Col. 7, lines 5 – 23).

Regarding Claims 7 – 9, 23, and 52, as shown in Fig. 4, Suman’s microcontroller 52 is able to communicate with vehicle 10’s starter and door locks via data bus 80 (see Col. 9, lines 3 – 13 and Col. 11, lines 39 – 51), which are controllable vehicle devices.

6. Claims 10 – 15, 24 – 29, and 53 – 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,113,182 (Suman et al.) in view of U.S. Patent No. 6,011,460 (Flick) as applied to claims 1, 18, and 46 above, and further in view of U.S. Patent No. 5,986,571 (Flick).

Regarding Claims 10 – 15, 24 – 29, and 53 – 56, Suman, as modified by Flick (’460) teaches that control module 30 has switch 36 that switches microcontroller 52 into a learning mode (see

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Col. 5, lines 2 - 13) but is silent on microcontroller 52 causing the following: (1) an indication that the learning mode has been entered; (2) an indication of when the last learning mode was entered; (3) an indication for progressively indicating a passage of time since the learning mode was last entered; (4) an indication of the number of learned remote transmitters; (5) an indication of a change in the number of learned remote transmitters; and (6) an indication of a change in a code of at least one of the learned remote transmitters.

In an analogous art, Flick ('571) teaches a building security system 10, as shown in Fig. 3, comprising (a) remote transmitters 50 and (b) building security controller 11. Per Flick, building security controller 11 includes a transmitter and receiver 13 for receiving signals from remote transmitter 50 (see Col. 3, lines 46 - 50) and a central processing unit (CPU) 12 for communicating with building sensor 20, alarm indicators 23, and system indicators 24 (see Figs. 1 and 3; Col. 3, lines 61 - 67; and Col. 4, lines 39 - 47). Flick's CPU 12 has a remote transmitter learning means 47 for learning a remote transmitter 50 that is to switch building security controller 11 between armed and disarmed modes (see Col. 4, lines 39 - 42). Flick discloses that system indicators 24 include lights, audible tone generators, etc. (see Col. 4, lines 8 - 10 and Col. 5, lines 21 - 34) and are actuated by CPU 12 for: (1) indicating that building security controller 11 has entered a learning mode (see Col. 4, lines 63 - 56); (2) indicating when the learning mode was last entered (see Col. 5, lines 1 - 3); (3) progressively indicating a passage of time since the learning mode was last entered (see Col. 5, lines 3 - 5); (4) indicating the number of learned remote transmitters (see Col. 5, lines 21 - 26 and 48 - 51); (5) indicating a change in the number of learned remote transmitters (see Col. 5, lines 51 - 53); and (6) indicating a change in a code of at least one of the learned remote transmitters (see Col. 5, lines 51 - 53).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Suman and Flick's control module 30 as taught by Flick ('571) because having a control module 30 that is able to cause the various indications listed above (1) ensures a user that only the coded remote transmitters under his/her control may operate the vehicle security system, (2) prevents unauthorized remote transmitters from being surreptitiously learned by control module 30, and (3) enables a user to determine how recently the learn mode or transmitter change has occurred so that the user is able to correlate the change with someone's ability to access the system (see Col. 5, lines 26 - 30 and Col. 7, lines 43 - 47).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,113,182 (Suman et al.) in view of U.S. Patent No. 6,011,460 (Flick) as applied to claim 1 above, and further in view of U.S. Patent No. 5,736,935 (Lambropoulos).

Suman's vehicle door locking system, as modified by Flick, includes a remote transmitter 20, not a transponder.

In an analogous art, Lambropoulos teaches a keyless vehicle entry and engine starting system that includes a portable transceiver A (see Fig. 1) and a vehicle transceiver C (see Fig. 2). As shown in Fig. 2, vehicle transceiver C includes a radio frequency (RF) detector 70 for receiving transceiver A's coded signal (see Col. 6, lines 2 - 8) and microcomputer 80 for controlling vehicle devices, such as door lock motor 112, door unlock motor 114, and ignition start 115. Lambropoulos discloses that vehicle transceiver C has an RF oscillator 120 for transmitting an interrogation signal to transceiver A (see Col. 6, lines 65 - 67 and Col. 7, lines 1 - 5) and is able to learn the security codes of one or more transceivers A (see Col. 6, lines 21 -

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47). Transceiver A responds to the interrogation signal by transmitting a reply to vehicle transceiver C (see Col. 5, lines 21 - 42); hence, transceiver A is a transponder.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Suman and Flick's security system as taught by Lambropoulos because a vehicle security system that includes a transponder that transmits its code when it receives an interrogation signal containing the proper interrogation code eliminates the need for manual operation of switches on a remote transmitter while maintaining a high level of security.

8. Claims 30 - 39, 42, 43, 45, and 57 - 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,271,745 (Anzai et al.) in view of U.S. Patent No. 6,011,460 (Flick).

Referring to Claims 30, 35, 45, 57, and 62, Anzai teaches a vehicle control system, as shown in Fig.1, comprising: (a) fingerprint sensors 11, 13, 15, and 39 for sensing a user's fingerprint (see Fig. 9, steps S89 and S91; and Col. 4, lines 24 - 28 and 44 - 45); (b) control unit 1 connected to sensors 11, 13, 15, and 39 (see Col. 4, lines 30 - 39); and (c) a plurality of vehicle devices, such as dashboard unit 3, ignition switch status unit 5, lock unit 7, and engine immobilizer unit 9. Per Anzai, control unit 1 performs the following steps: (1) communicates with the components of dashboard unit 3, ignition switch status unit 5, lock unit 7, and engine immobilizer unit 9 (see Figs. 5 - 9; Col. 4, lines 40 - 45 and 56 - 67; Col. 5, lines 1 - 19; and Col. 6, lines 25 - 60); (2) enrolls or learns fingerprints of various users (see Col. 6, lines 64 - 66); and (3) indicates that a new fingerprint has been learned by asking for confirmation of the enrollee via display unit 41 (see Col. 7, lines 58 - 67). Anzai's control unit 1 is spaced apart from the vehicle devices as shown in Fig. 1. Anzai's vehicle control system, though, lacks (1) a data bus



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extending throughout the vehicle, wherein the data bus connects control unit 1 to the vehicle devices, and (2) a vehicle alarm indicator.

In an analogous art, as previously explained in claims 1, 18, and 46, Flick discloses that (1) data communications bus 62 extends throughout the vehicle (see Col. 5, lines 11 - 31 and Col. 6, lines 24 - 30 and 50 - 58) and that (2) vehicle security sensor 60, alarm indicator 64, and other control nodes 66 are connected to data bus 62 (see Col. 6, lines 1 - 9 and 50 - 58 and Col. 7, lines 59 - 67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle security system of Anzai as taught by Flick because connecting vehicle devices directly to a data bus that extends throughout a vehicle reduces (1) the amount of wiring, (2) wire routing problems, and (3) complications that may arise when troubleshooting the electrical system (see Flick, Col. 1, lines 65 - 67 and Col. 2, lines 1 - 3). Furthermore, a vehicle alarm indicator thwarts theft by actuating the a siren and headlights when unauthorized access is detected (see Flick, Col. 7, lines 59 - 67), thereby enhancing vehicle security

Regarding Claims 31, 32, 58, and 59, Anzai's dashboard unit 3 has a display unit 41 (i.e., "vehicle indicator") that is used by control unit 1 to indicate that a fingerprint has been scanned and recorded by prompting the owner for confirmation of an enrollee (see Col. 7, lines 62 - 67).

Regarding Claims 33 and 60, Anzai's display unit 41 is within dashboard unit 3, which is an instrument panel (see Fig.3 and Col. 4, lines 40 - 50).

Regarding Claims 34 and 61, Anzai discloses that control unit 1 communicates with ignition switch status unit 5, which includes sensors 49, 51, and 53 (see Col. 4, lines 56 - 67), and lock unit 7, which includes sensor 67 (see Col. 5, lines 1 - 2 and 9 - 10).

Regarding Claims 36 - 38 and 63, as explained above in Claims 1 and 57, Anzai teaches that control unit 1 communicates with controllable vehicle devices, such as lock unit 7 and engine immobilizer unit 9.

Regarding Claims 39 and 64, Anzai teaches that a user is able to place control unit 1 in various modes via switches 43a and 43b on dashboard unit 3 (see Col. 6, lines 61 - 67 and Col. 7, lines 1 - 4). When a user selects the menu mode, control unit 1 enables the user to enroll additional users, view or deleted enrollees, and set up the system (see Fig. 4). When a user selects the enroll mode (see Fig. 8, steps S55 and S57), the display changes and prompts the user for the category of authorization (i.e., owner, driver, and non-drive) (see Col. 7, lines 42 - 45); hence the display of authorization categories is an indication that the learning mode has been entered.

Regarding Claims 42 - 43 and 65 - 66, per Anzai, when the view/delete mode is selected via dashboard unit 3, display unit 41 provides a list of the initials and category of authorization for each enrollee (see Col. 8, lines 1 - 7); as shown at step S101 in Fig. 10, the record for the eighth enrollee of the twelve enrollees is displayed. Consequently, each time an enrollee is added or deleted, the list indicates the change in the number of learned individuals.

9. Claims 40, 41, 44, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,271,745 (Anzai et al.) in view of U.S. Patent No. 6,011,460 (Flick) as applied to claims 30 and 57 above, and further in view of further in view of U.S. 5,986,571 (Flick).

Regarding Claims 40, 41, 44, and 67, Anzai and Flick ('460) silent on control unit 1 causing the following: (1) an indication of when the last learning mode was entered; (2) an indication for progressively indicating a passage of time since the learning mode was last entered; and (3) an indication of a change in a learned unique biometric characteristic.

In an analogous art, as explained above in Section 5, Flick ('571) teaches a building security system 10 comprising (a) remote transmitters 50 and (b) building security controller 11 (see Fig. 3). Per Flick, building security controller 11 includes a transmitter and receiver 13 for receiving signals from remote transmitter 50 (see Col. 3, lines 46 - 50) and a central processing unit (CPU) 12 for communicating with building sensor 20, alarm indicators 23, and system indicators 24 (see Figs. 1 and 3; Col. 3, lines 61 - 67; and Col. 4, lines 39 - 47). Flick discloses that system indicators 24 include lights, audible tone generators, etc. (see Col. 4, lines 8 - 10 and Col. 5, lines 21 - 34) and are actuated by CPU 12 for: (1) indicating when the learning mode was last entered (see Col. 5, lines 1 - 3); (2) progressively indicating a passage of time since the learning mode was last entered (see Col. 5, lines 3 - 5); and (3) indicating a change in a code of a learned remote transmitter (see Col. 5, lines 51 - 53).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Anzai and Flick's control unit 1 as taught by Flick ('571) because having a control module 30 that is able to cause the various indications listed above (1) ensures a user that only the coded remote transmitters under his/her control may operate the vehicle security system, (2) prevents unauthorized remote transmitters from being surreptitiously learned by control module 30, and (3) enables a user to determine how recently the learn mode or biometric code change has occurred so that the user is able to correlate the change with someone's ability to access the system (see Flick '571, Col. 5, lines 26 - 30 and Col. 7, lines 43 - 47).

*Conclusion*

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (703) 305-4086. The examiner can normally be reached on 8:30 AM - 7:00 PM, Monday - Thursday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CY

7 July 2004

  
BRIAN ZIMMERMAN  
PRIMARY EXAMINER